



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,311	08/31/2001	Peter Adebjork	19391.0025	2311
7590	12/17/2003		EXAMINER	
Edward A Pennington Swidler Berlin Shereff Friedman 3000 K Street NW Suite 300 Washington, DC 20007-5166			ALLEN, ANDRE J	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,311

Applicant(s)

ADEBJORK ET AL.

Examiner

Andre J. Allen

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on election filed 9-24-03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicre et al.

Regarding claims 1,3 and 12 Sicre et al. teaches calculating an attitude and correcting it by means of air data and heading (col. 4 lines 60-64). Sicre et al does not clearly teach attitude being calculated on the basis of fixed rates p,q and r (yaw, pitch, roll). Doty teaches attitude being calculated on the basis of fixed rates p,q and r (yaw, pitch, roll) (col. 6 line 45). It would have been obvious to a person having ordinary skill in the art of monitoring aircraft activity at the time the invention was made to modify Sicre et al by using p,q and r rates to determine an aircrafts attitude as taught by Doty for the purpose of observing or determining an aircrafts demeanor since p,q and r (yaw, pitch, roll) are parameters needed to determine an aircrafts attitude.

Regarding claims 2,3 and 11 Sicre et al does not clearly teach a heading gyro, but Sicre et al does teach obtaining an aircrafts heading (abstract) . It would have been obvious to a person having ordinary skill in the art of monitoring aircraft to modify Sicre et al to use a heading gyro over any other means of obtaining the heading due to undo-experimentation for the purpose of gathering heading information more effectively.

Regarding claim 4 Sicre et al teaches correction of the integrated out attitude takes place with the aid of attitude calculated on the basis of air data and heading information. (col. 2 lines 45-50, col. 4 lines 60-65, col. 8 lines 55-60)

Regarding claims 10 and 14 Sicre et al teaches a unit (fig. 1) that outputs the aircrafts attitude GPS1 GPS2 (col.4 lines 60-61) from info from the p,q and r (yaw pitch roll) as well as a calculated attitude corrected by means of a reference attitude (col. 3 lines 65-67) from air data and heading. However Sicre et al does not clearly show attitude calculated from p,q and r. It would have been obvious to a person having ordinary skill in the art of monitoring aircraft activity at the time the invention was made to modify Sicre et al by using p,q and r rates to determine an aircrafts attitude as taught by Doty for the purpose of observing or determining an aircrafts demeanor since p,q and r (yaw, pitch, roll) are parameters needed to determine an aircrafts attitude.

Allowable Subject Matter

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not disclose nor suggest synthetically generating a corrected attitude by generating a difference between the attitude obtained from the integration routine and an error signal that represents the error between the integrated attitude and an the reference attitude.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 703-3081989. The examiner can normally be reached on mon-fri 8:00-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is 703-308-3432.

Application/Control Number: 09/889,311
Art Unit: 2855

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A.J.A
Art Unit



EDWARD LEPKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800